AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) IntervertebralAn intervertebral implant (1), specifically an artificial intervertebral disk, with comprising a central axis (2), an upper section (10), suitable for laying onto the base plate of a vertebral body lying above and a lower section (20) suitable for laying onto the cover plate of a vertebral body lying below, wherein
- A) the upper section (10) is provided with a ventral side area (11), a dorsal side area (12), two lateral side areas (13,14), a top apposition surface (15) and a bottom surface (16);
- B) the lower section (20) is provided with a ventral side area (21), a dorsal side area (22), two lateral side areas (23,24), a bottom apposition surface (25) and a top surface (26); wherein
- C) the two sections (10;20) moveable in relation to each other by means of two joints (38;39) arranged between the two sections (10;20),
- D) each of the joints (38;39) is provided with a swivel axle (3;4) and the two swivel axles (3;4) are arranged perpendicular to each other;
- E) the two joints (38;39) are realised by means of an upper joint element (31) connected with the upper section (10), a central joint element (32) and a joint element (33) connected with the lower section (20);

- F) one of the external joint sections (31;33) comprises at least one concave sliding surface (58) rotation-symmetrical with regard to a swivel axle (3;4); and
- G) the central joint section (32) comprises at least one convex sliding surface (57) complementary to this concave sliding surface (58), wherein characterised in that
- H) the other of the external joint sections (31;33) comprises at least one convex sliding surface (55) rotation-symmetrical with regard to the other swivel axle (3;4); and
- I) the central joint section (32) comprises at least one concave sliding surface (56) complementary to this convex sliding surface (55)
- K) the sliding surfaces (55;56;57;58) are configured as partial surface areas of circular cylindrical or circular conical surface areas; and
- L) the swivel axes (3;4) are arranged skewed to each other.
- 2. (Currently Amended) Intervertebral The intervertebral implant (1) according to Claim 1, characterised in that wherein the lower joint element (33) comprises at least one lower concave sliding surface (58) rotation-symmetrical with regard to the first swivel axle (3) and the central joint section (32) at least one lower convex sliding surface (57) complementary to the lower concave sliding surface (58).
- 3. (Currently Amended) Intervertebral The intervertebral implant (1) according to Claim 1-or Claim 2, characterised in that wherein the upper joint element (31) comprises at least one upper convex sliding surface (55) rotation-symmetrical with regard to the second swivel axle (4) and the central joint section (32) at least one

upper concave sliding surface (56) complementary to the upper convex sliding surface (55).

4.-6. (Cancelled)

7. (Currently Amended) Intervertebral The intervertebral implant (1) according to one of the claimsclaim 1-to-6, characterised in that wherein a means (40) is provided that keeps the two sections (10;20), measured at their ventral side areas (11;21), at a fixed distance from each other.

- 8. (Currently Amended) Intervertebral The intervertebral implant (1) according to one of the claimsclaim 1-to 6, characterised in that wherein a means (40) is provided that is suitable for causing temporary blocking of the mobility of the two sections (10,20) around the joints (38;39).
- 9. (Currently Amended) Intervertebral The intervertebral implant (1) according to Claim 7-or Claim 8, characterised in that wherein the means (40) can be attached to the two ventral side areas (11,21) of the two sections (10;20).
- 10. (Currently Amended) Intervertebral The intervertebral implant (1) according to Claim 8-or Claim 9, characterised in that wherein the means (40) include an insert (41) with a lower end (45) and an upper end (46) and a depression (42;43) in the surfaces (16;26) at each of the two sections (10;20), which are open on the ventral side areas (11;21), and that the insert (41) with its ends (45;46) can be inserted into

National Stage of PCT Application No.: PCT/CH2002/000707 Amendment Dated: June 14, 2005

each of the depressions (42;43).

11. (Currently Amended) Intervertebral The intervertebral implant (1) according to

Claim 10, characterised in thatwherein the depressions (42,43) are dovetail guides

and the ends (45;46) on the insert (41) are arranged complementary to these

dovetail guides.

12. (Currently Amended) Intervertebral The intervertebral implant (1) according to

Claim 11, characterised in thatwherein the dovetail guides are tapered from the

ventral side areas (11;21) towards the dorsal side areas (12;22).

13. (Currently Amended) Intervertebral The intervertebral implant (1) according to

one of the claimsclaim 1 to 12, characterised in that wherein the upper and the lower

section (10;20) each comprises at least two drill holes (80) running through from the

ventral side areas (11;21) to the apposition surfaces (15;25) with longitudinal axes

(83) for receiving bone fixation devices (81).

14. (Currently Amended) Intervertebral The intervertebral implant (1) according to

Claim 13, characterised in thatwherein the longitudinal axes (83) of the drill holes

(80) make an angle γ with the central axis (2).

15. (Currently Amended) Intervertebral The intervertebral implant (1) according to

Claim 14, characterised in that wherein the angle γ lies in a range of between 20°

and 65°.

- 16. (Currently Amended) Intervertebral The intervertebral implant (1) according to
- one of the claimsclaim 13 to 15, characterised in thatwherein the longitudinal axes
- (83) of the drill holes (80) as seen from the ventral side areas (11;21) diverge from
- the inner surfaces (16;26) against the apposition surfaces (15;25).
- 17. (Currently Amended) Intervertebral The intervertebral implant (1) according to
- one of the claims claim 13 to 16, characterised in that wherein the drill holes (80) are
- conically tapered towards the apposition surfaces (15;25).
- 18. (Currently Amended) Intervertebral The intervertebral implant (1) according to
- one of the claimsclaim 13 to 17, characterised in that wherein the drill holes (80) are
- provided with an internal thread (82).
- 19. (Currently Amended) Process A process for the replacement of a defect, natural
- intervertebral disk characterised by an intervertebral implant, with comprising the
- steps:
- A) blocking of the joint(s) (38;39) of an intervertebral implant (1) through the special
- means (40) in a certain position of the joint(s) (38;39);
- B) insertion of the intervertebral implant (1) into the intervertebral space to be
- treated; and
- C) release and removal of the device (40) inserted into the intervertebral implant (1)
- for blocking the joint(s) (38;39).

20. (Currently Amended) Process The process according to Claim 19, characterised in that it additionally comprises comprising the step of the subsequent blocking of the joint(s) (38;39) on the implanted intervertebral implant (1) through the means (40).